

K021435

**GE Medical Systems** Information Technologies

General Electric Company 4502 Woodland Corporate Blvd., Tampa, FL 33614 813 887-2000

# SUMMARY OF SAFETY AND EFFECTIVENESS

May 3, 2002

### **DINAMAP® Pro Series 110N-410N Monitor**

#### A. Submitter

GE Medical Systems Information Technologies 4502 Woodland Corporate Boulevard Tampa, FL 33614

## **B.** Company Contact

Melissa Robinson Regulatory Affairs Specialist

Phone: 813-887-2133 Fax: 813-887-2552

#### C. Common Name

Physiological or Vital Signs Monitor, Patient Monitor

Classification Name	Product Code	21 CFR
System, Measurement, Blood Pressure, Noninvasive	DXN	870.1130
Computer, Blood Pressure	DSK	870.1110
Alarm, Blood Pressure	DSJ	870.1100
Oximeter	DQA	870.2700
Oximeter, Ear	DPZ	870.2710
Thermometer, Clinical Electronic	FLL	880.2910
Recorder, Paper Chart	DSF	870.2810

## D. Predicate/Legally Marketed Devices

DINAMAP® Pro Series Monitor 110-410-K020022 GE Medical Systems Information Technologies

#### E. Device Description

The DINAMAP Pro Series 110N-410N Monitor is a prescription device intended for use only by health care professionals. Four configurations of the monitor-all with integrated printer-will offer the following vital signs parameters:

- DINAMAP 110N: Non-Invasive Blood Pressure and Pulse Rate
- DINAMAP 210N: Non-Invasive Blood Pressure and Pulse Rate, Temperature
- DINAMAP 310N: Non-invasive Blood Pressure and Pulse Rate, Pulse Oximetry
- DINAMAP 410N: Non-Invasive Blood Pressure and Pulse Rate, Pulse Oximetry and Temperature.

This portable device includes an integrated printer and is capable of operation from an external AC mains power source or an internal lead-acid rechargeable battery.

### F. Intended Use

The DINAMAP® Pro Series 110N-410N Monitor is intended to monitor a single adult, pediatric or neonatal patient's vital signs at the bedside or during intra-hospital transport. Vital signs parameters include non-invasive blood pressure (systolic, diastolic, and mean arterial pressure), pulse rate, and/or oxygen saturation (pulse oximetry) and/or temperature. The portable device is designed for use in numerous clinical settings in various hospital departments such as emergency, radiology, recovery, medical/ surgical, labor and delivery, endoscopy, cardiac step-down. It can also be used in satellite areas, physicians' offices, or alternate care settings.

G. Technological Characteristics

The DINAMAP® Pro Series 110N-410N Monitor has the same technological characteristics as the predicate device, the DINAMAP® Pro Series 110-410 Monitor. There are no new technologies used on the DINAMAP® Pro Series 110N-410N Monitor.

H. Parameter Technology

The DINAMAP® Pro Series 110N-410N Monitor has the following parameter technologies:

- •NIBP ASAP algorithm as implemented on the Pro Series 110-410
- Alaris IVAC Turbo thermometry technology as implemented on the Pro Series 110-410
- •Wholly implemented Nellcor N-595 SpO2 technology

I. Testing

Several bench studies were conducted which demonstrate safety and effectiveness of the DINAMAP® Pro Series 110N-410N Monitor:

- Electromagnetic Compatibility
- Electrical Safety
- Mechanical and Environmental

# K. Substantial Equivalence

Pro Series 110N-410N	Predicate Device & Model	510(k) Numbers
Monitor	DINAMAP Pro Series 110-410	K020022
Pulse Oximetry	Nellcor N-595 Pulse Oximeter	K012891
Temperature	Alaris Medical System	K955846
NIBP	DINAMAP Pro Series 110-410	K020022



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

# MAY 2 2 2002

Ms. Melissa Robinson Regulatory Affairs Specialist GE Medical Systems Information Technologies 4502 Woodland Corporate Blvd. Tampa, FL 33614

Re: K021435

Trade Name: DINAMAP® Pro Series 110N-410N Monitor

Regulation Number: 21 CFR 870.2300 and 870.2700 Regulation Name: Cardiac Monitor and Oximeter

Regulatory Class: Class II (two) Product Code: MWI and DQA

Dated: May 2, 2002 Received: May 6, 2002

#### Dear Ms. Robinson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

## Page 2 - Ms. Melissa Robinson

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4646. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Donna-Bea Tillman, Ph.D.

Acting Director

Division of Cardiovascular and Respiratory Devices Office of Device Evaluation Center for Devices and

Radiological Health

Enclosure

# INDICATIONS FOR USE

510(k) Number (if known):	K021435	·
Device Name: DINAMAP®	Pro Series 110N-41	0N Monitor
Indications for Use:		
pediatric or neonatal patient's vital signs parameters include arterial pressure), pulse rate an oximetry). The portable device various hospital departments sure	vital signs at the bed non-invasive blood d/or temperature an e is designed for use uch as emergency, r cardiac step-down.	is intended to monitor a single adult, dside or during intra-hospital transport. pressure (systolic, diastolic, and mean d/or oxygen saturation (pulse in numerous clinical settings in adiology, recovery, medical/surgical, It can also be used in satellite areas,
(PLEASE DO NOT WRITE BELOV	W THIS LINE-CONTIN	IUE ON ANOTHER PAGE IF NEEDED)
Concurrence of	CDRH, Office of I	Device Evaluation (ODE)
Division of Card 510(k) Number	diovascular & Respirator	y Devicēs
Prescription Use	OR	Over-The Counter Use(Optional Format 1-2-96)